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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/291,358	04/14/1999	KENJI MASAKI	325772200960	2014

25227 7590 07/01/2004  
MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 300  
MCLEAN, VA 22102

EXAMINER

BHATNAGAR, ANAND P

ART UNIT PAPER NUMBER

2623

DATE MAILED: 07/01/2004

22

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/291,358

Applicant(s)

MASAKI, KENJI

Examiner

Anand Bhatnagar

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,7-9 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2, 7-9, and 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's amendment filed on 04/06/04 has been entered and made of record.
2. Applicant has cancelled claim 21. Presently, claims 1, 2, 7-9, and 14-20 are pending.
3. Applicant's arguments filed on 04/06/04 (paper #21) have been fully considered but they are not persuasive.

Applicant's representative in essence argues, paper # 21 page 5 1<sup>st</sup> paragraph, that applicant's instant invention performs a correction processing with respect to one or more items regarding the quality of the image colors and that the image correction is not required by the operator. Examiner refers to the rejection below which shows that the prior art used of Fuss et al. (U.S. patent 5,347,374) with the prior art of Akimoto et al. (U.S. patent 4,364,084) and Toyoda et al. (U.S. patent 5,461,440) meets the limitations as claimed in the claimed language and it performs it on one or more features (contrast, sharpness, etc.). As for the argument as not needing an operator to judge the needing of correction to take place is nowhere in the claim language and further the system of the prior art of Fuss et al. is an automated system of judging and correcting color images.

Applicant's representative argues also argues, paper #21 page 5 bottom paragraph, that the prior art of Fuss performs the judging and correcting color

images in a different manner than applicant's instant invention. Nowhere in the claim language is it stated how applicant's instant invention judging and correcting processed are performed.

Applicant further argues that the prior art of Akimoto nor Toyoda discloses judging whether correction of image data of a color image is necessary based on a quality of sunset scene, the color image covered with a specific color, contrast, and sharpness of the whole area of the image data. Examiner disagrees. As argued by applicant's representative on, paper #21 page 5 1<sup>st</sup> paragraph, applicant's instant invention is performing correction processing on one or more items regarding the quality of the color images. Therefore, examiner believes that the prior art applied meets the claimed invention.

Examiner refers to the rejection below.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7-9, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuss et al. (U.S. patent 5,347,374), Toyoda et al. (U.S. patent 5,461,440) and Akimoto et al. (U.S. patent 4,364,084).

Regarding claims 1 and 15: Fuss discloses an image processing method, comprising:

judging whether correction, of image data of a color image is necessary based on a quality of sunset scene, the color image covered with a specific color, and contrast of the whole area of the image data (Fuss; fig. 2 elements 170, 122, and 130, col. 4 lines 28-33, and col. 6 lines 4-11, where the color and contrast of a natural scene is judged and appropriate adjustment made to the image based on the judgement).

Fuss discloses to enhance the color and contrast of a natural image. Fuss does not disclose to enhance the sharpness of an image. Toyoda teaches to enhance the sharpness in an image (Toyoda; fig. 8 element S111 and col. 8 lines 60-66). It would have been obvious to one skilled in the art to combine the teaching of Toyoda to that of Fuss because they are analogous in color correction of images. One in the art would have been motivated to incorporate the teaching of Toyoda into the system of Fuss in order to smooth edges within the image which may have been distorted.

Fuss discloses to enhance the color and contrast of a natural image. Fuss does not disclose to judge an image that contains a sunset scene and to correct the image if it is judged that correction is needed. Akimoto et al. teaches to

correct an image that contains sunset light/scene (Akimoto et al.; col. 4 lines 7-16). It would have been obvious to one skilled in the art to combine the teaching of Akimoto to that of Fuss because they are analogous in color image correction. One in the art would have been motivated to incorporate the teaching of Akimoto into the system of Fuss in order to correct for a color imbalance due to the type of illumination such as a sunset.

performing a predetermined correction processing on at least a portion of the color image based on the judgment of the quality of the image data (Fuss; col. 6 lines 5-11 and 34-38. A portion is read as the whole image since the image was not divided).

Regarding claim 2: An image processing method according to claim 1, wherein the necessity/nonnecessity of correction is judged based on the whole area of the image data (Fuss; col. 5 lines 42-46, where the RGB data of the whole image is converted into a histogram of luminance data which is used to correct the image for color and contrast).

Regarding claims 7 and 14: An image processing wherein the necessity/nonnecessity of correction is judged based on items pieced together (Fuss; col. 6 lines 5-12, where the color and contrast data are used together to correct the image).

Regarding claim 8: It is rejected for the same reason as claim 1 and for the following limitation of: a memory which stores an image data of a color

image. The color correction process is performed by a color processor wherein it is obvious that a memory must be present to store the color information.

Regarding claim 9: It is rejected for the same reason as claim 1 above.

Regarding claims 16 and 17: An image processing further comprising:  
converting color components R, G and B of the image data into hue data, lightness data and saturation data, wherein the hue data, lightness data and saturation data are used on the judgment of the quality of the image data.

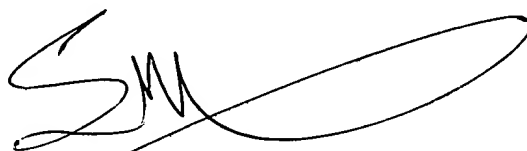
Fuss discloses to transform the RGB data into luminance color space to perform color correction (Fuss; col. 5 lines 43-47). Fuss does not teach to transform the RGB data into the hue, lightness, and saturation color space. It would have been obvious to one skilled in the art to use any number of color spaces which are well known in color image processing to perform judgment on the image quality in order to perform color correction.

Regarding claims 18 and 20: It is rejected for the combination of claim 1 and 7 above.

Regarding claim 19: It is rejected for the same reason as claim 1 above.

**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group fax is 703-872-9306, and Tech center 2600 customer service office number is 703-306-0377.

A handwritten signature in black ink, appearing to read 'SM', with a long, sweeping horizontal line extending from the bottom of the signature across the page.

**SAMIR AHMED  
PRIMARY EXAMINER**

Handwritten initials 'AB' in black ink.

Anand Bhatnagar

Art Unit 2623

June 28, 2004